

State of Montana  
Department of Environmental Quality  
Helena, Montana 59620

**AIR QUALITY OPERATING PERMIT NUMBER OP2736-02**

Significant Modification Application Received: **05/21/02**  
Application Deemed Administratively Complete: **05/30/02**  
Application Deemed Technically Complete: **07/14/02**  
AFS Number: **030-025-0001A**

Draft Issue Date: **12/06/02**  
Proposed Issue Date: **01/17/03**  
End of EPA 45-day Review: **03/07/03**  
Date of Decision: **03/18/03**  
Effective Date: **04/18/03**  
Expiration Date: **07/14/04**

In accordance with the Montana Code Annotated sections 75-2-217 and 218, and the Administrative Rules of Montana (ARM) Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, *et seq.*,

**Bear Paw Energy, Inc.**  
**Baker Gas Plant**  
**Section 6, Township 7 North, Range 60 East**  
**Fallon County, Montana**

hereinafter, referred to as “Bear Paw”, is authorized to operate a stationary source of air contaminants consisting of the emission units described in this permit. Until this permit expires or is modified or revoked, Bear Paw is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable unless otherwise specified. Requirements that are state only enforceable are identified as such in the permit. A copy of this permit must be kept on site at the above named facility.

Issued by the Department of Environmental Quality

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Permit Issuance and Appeal Process:** In accordance with ARM 17.8.1210(j), the Department of Environmental Quality’s (Department) decision regarding issuance of an operating permit is not effective until 30 days have elapsed from the date of the decision issued March 18, 2003. The decision may be appealed to the Board of Environmental Review by filing a request for a hearing within 30 days after the date of decision. If no appeal is filed then the Department will send notification and a final permit cover page to be attached to this document stating that the permit is final. In addition, ARM 17.8.1233 allows for any person to petition the Environmental Protection Agency (EPA) within 60 days after the expiration of EPA’s 45-day review period to object to issuance of this operating permit. If EPA objects to the operating permit as a result of a petition prior to the Department’s notification of a final permit, Bear Paw and all affected parties will be informed of the stay of a final permit. If the Department has already notified Bear Paw and all affected parties, the Department shall issue a revised permit according to ARM 17.8.1231. Questions regarding the final issuance date and status of appeals should be directed to the Department at (406) 444-3490.

**Montana Air Quality Operating Permit  
Department of Environmental Quality  
Permitting and Compliance Division**

**TABLE OF CONTENTS**

<b>SECTION I - GENERAL INFORMATION .....</b>	<b>1</b>
<b>SECTION II - SUMMARY OF EMISSION UNITS .....</b>	<b>2</b>
<b>SECTION III - PERMIT CONDITIONS .....</b>	<b>3</b>
A. FACILITY-WIDE.....	3
B. EU01 - 448 HP COMPRESSOR ENGINE .....	7
C. EU02 - 800 HP COMPRESSOR ENGINE .....	10
D. EU04 AND EU09 - CHALLENGER FLARE AND GUYED UTILITY FLARE.....	13
E. EU05 - FUGITIVE EMISSIONS.....	15
F. EU06 - ETHYLENE GLYCOL REGENERATOR VENT .....	16
G. EU07 - PRODUCT LOADING .....	17
H. EU08 - STORAGE TANKS .....	18
I. EU11 - 1250 HP COMPRESSOR ENGINE(S).....	19
J. EU12 - AMINE REGENERATOR .....	22
<b>SECTION IV - NON-APPLICABLE REQUIREMENTS .....</b>	<b>23</b>
A. FACILITY-WIDE.....	23
B. EMISSION UNITS.....	23
<b>SECTION V – GENERAL PERMIT CONDITIONS .....</b>	<b>24</b>
A. COMPLIANCE REQUIREMENTS .....	24
B. CERTIFICATION REQUIREMENTS.....	24
C. PERMIT SHIELD .....	25
D. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS .....	26
E. PROMPT DEVIATION REPORTING .....	27
F. EMERGENCY PROVISIONS .....	27
G. INSPECTION AND ENTRY .....	28
H. FEE PAYMENT .....	28
I. MINOR PERMIT MODIFICATIONS.....	29
J. CHANGES NOT REQUIRING PERMIT REVISION.....	29
K. SIGNIFICANT PERMIT MODIFICATIONS .....	30
L. REOPENING FOR CAUSE .....	30
M. PERMIT EXPIRATION AND RENEWAL .....	31
N. SEVERABILITY CLAUSE.....	31
O. TRANSFER OR ASSIGNMENT OF OWNERSHIP .....	32
P. EMISSIONS TRADING, MARKETABLE PERMITS, ECONOMIC INCENTIVES .....	32
Q. NO PROPERTY RIGHTS CONVEYED .....	32
R. TESTING REQUIREMENTS.....	32
S. SOURCE TESTING PROTOCOL.....	32
T. MALFUNCTIONS .....	32
U. CIRCUMVENTION.....	32
V. MOTOR VEHICLES.....	32
W. ANNUAL EMISSIONS INVENTORY .....	33
X. OPEN BURNING .....	33
Y. PRECONSTRUCTION PERMITS.....	33
Z. NATIONAL EMISSION STANDARD FOR ASBESTOS.....	34

AA. ASBESTOS.....	34
BB. STRATOSPHERIC OZONE PROTECTION – SERVICING OF MOTOR VEHICLE AIR CONDITIONERS....	34
CC. STRATOSPHERIC OZONE PROTECTION – RECYCLING AND EMISSION REDUCTIONS.....	34
DD. EMERGENCY EPISODE PLAN .....	35
EE. DEFINITIONS.....	35

## APPENDICES

APP. A, INSIGNIFICANT EMISSION UNITS .....	A-1
APP. B, DEFINITIONS AND ABBREVIATIONS .....	B-1
APP. C, NOTIFICATION ADDRESSES .....	C-1
APP. D, AIR QUALITY INSPECTOR INFORMATION.....	D-1

## SECTION I - GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

Company Name: **Bear Paw Energy, Inc.**

Mailing Address: **370 Seventeenth Street, Suite 2750**

City: **Denver**

State: **CO**

Zip: **80202**

Plant Name: **Baker Gas Processing Plant**

Plant Location: **County Road 81 #603, SW¼, SW¼, Section 6, Township 7 North, Range 60 East in Fallon County, MT**

Plant Mailing Address: **P.O. Box 580, Baker, MT 59313**

Responsible Official: **Chris Martinez**

Phone: **(720) 946-3682**

Facility Contact Person: **Chris Martinez**

Phone: **(720) 946-3682**

Primary SIC Code: **1321**

Nature of Business: **Recovery of natural gas liquids**

Description of Process: **The Baker Gas Plant receives natural gas from surrounding fields. Initial compression of the gas is accomplished by compressor engines. The compressed natural gas is then dehydrated through an ethylene glycol treating system. In addition to water, some benzene, toluene, ethyl benzene, and xylene (BTEX), and VOCs from the natural gas are also removed. The VOCs and BTEX are then separated from the glycol in the regenerator. The dehydrator regenerator off gases are routed to the Anderson Hot Oil Heater for thermal destruction. When the heater is not operating, the off gases are routed to the inlet condensate knockout drum. Any H<sub>2</sub>S present in the incoming gas stream is removed by the amine sweetening unit. The rich amine flows to a preheater before going on to the regenerator. The regenerator uses a direct-fired reboiler to heat the rich amine solution burning off the absorbed acid gases. Acid gas leaving the regenerator is burned continuously in the Guyed Utility Flare. The additional Challenger Flare is only used for emergency upset conditions. The Guyed Utility Flare is continuously piloted with pipeline quality natural gas and is equipped with an autoignitor, while the Challenger Flare is equipped with an electric spark ignitor. Lean amine, now stripped of acid gas, flows back through the lean/rich exchanger to preheat the rich amine going to the regenerator. The plant also serves as a fractionation plant. After being dehydrated and desulfurized, natural gas is broken down into its components. The individual components are butane, propane, gasoline, and natural gas. These components are stored in tanks prior to loading of trucks. The VOC product loading at the plant is operated under a vapor balance system. All VOC product loading to tank trucks is conducted using bottom loading. Vapor flash resulting from loadout operations is returned to the associated storage vessel to maintain vapor balance emissions control. Upon completion of VOC production loadout, all lines used for loading are purged of VOC vapors. The VOC vapors are then routed to a flare for thermal destruction.**

## SECTION II - SUMMARY OF EMISSION UNITS

The emission units regulated by this permit are the following (ARM 17.8.1211):

<b>Emissions Unit ID</b>	<b>Description</b>	<b>Pollution Control Device/Practice</b>
EU01	448-hp Waukesha Compressor Engine	Air-to-fuel ratio (AFR) controller and a non-selective catalytic reduction (NSCR) unit
EU02	800-hp White Superior Compressor Engine	AFR controller and a NSCR unit
EU04	Challenger Flare	None
EU05	Fugitive Emissions	None
EU06	Ethylene Glycol Regenerator Vent	None
EU07	Product Loading	None
EU08	Condensate/Natural gas storage tank	Fixed roof, vapor balance system, submerge filled and pressure/vacuum vent
EU09	Guyed Utility Flare	None
EU11	Compressor Engine(s), 1250-hp	Catalytic converter for each engine
EU12	Amine Regenerator, 4.2 MMScf/d	Flare
EU13	Y-grade horizontal storage tank	Pressurized tank, vapor balance system, submerge filled and pressure/vacuum vent
EU14	Y-grade horizontal storage tank	Pressurized tank, vapor balance system, submerge filled and pressure/vacuum vent
EU15	Propane horizontal storage tank	Pressurized tank, vapor balance system, submerge filled and pressure/vacuum vent
EU16	Propane horizontal storage tank	Pressurized tank, vapor balance system, submerge filled and pressure/vacuum vent
EU17	Butane horizontal storage tank	Pressurized tank, vapor balance system, submerge filled and pressure/vacuum vent
EU18	Butane horizontal storage tank	Pressurized tank, vapor balance system, submerge filled and pressure/vacuum vent
EU19	Natural gasoline storage tank	Fixed roof, vapor balance system, submerge filled and pressure/vacuum vent
EU20	Natural gasoline storage tank	Fixed roof, vapor balance system, submerge filled and pressure/vacuum vent
EU23	Methanol storage tank	Fixed roof, vapor balance system, submerge filled and pressure/vacuum vent

### SECTION III - PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

#### A. Facility-Wide

Facility- Wide Permit Conditions				
Condition	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.2	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.3	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.4	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precaution	-----
A.5	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution - Construction	20%
A.6	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{-0.1664}$ or $E = 1.026 * H^{-0.233}$
A.7	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	11lb/MMBtu fired
A.8	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.9	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-----
A.10	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-----
A.11	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-----
A.12	ARM 17.8.316	Incinerator	Design	-----
A.13	ARM 17.8.316	Incinerator	Particulate Matter	0.10 gr/dscf
A.14	ARM 17.8.316	Incinerator	Opacity	10%
A.15	ARM 17.8.710	Conditions for Issuance of Permit	Production Limit	3,102.5 MMScf/rolling 12 mo.
A.16	ARM 17.8.710	Recordkeeping Requirement	Compliance Monitoring	-----
A.17	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-----
A.18	ARM 17.8.1207	Reporting Requirements	Annual Certification	-----
A.19	40 CFR 68	Chemical Accident Prevention	Risk Management Plan	-----

#### Conditions

OP2736-02

- A.1 Pursuant to ARM 17.8.304(1), Bear Paw shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.2 Pursuant to ARM 17.8.304(2), Bear Paw shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.3 Pursuant to ARM 17.8.308(1), Bear Paw shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.4 Pursuant to ARM 17.8.308(2), Bear Paw shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter unless otherwise specified by rule or in this permit.
- A.5 Pursuant to ARM 17.8.308, Bear Paw shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater average over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.6 Pursuant to ARM 17.8.309 unless otherwise specified by rule or in this permit, Bear Paw shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):  $E = 0.882 * H^{-0.1664}$

For new fuel burning equipment (installed on or after November 23, 1968):  $E = 1.026 * H^{-0.233}$

Where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs per MMBtu.

- A.7 Pursuant to ARM 17.8.322(4), Bear Paw shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million Btu fired unless otherwise specified by rule or in this permit.
- A.8 Pursuant to ARM 17.8.322(5), Bear Paw shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions unless otherwise specified by rule or in this permit.
- A.9 Pursuant to ARM 17.8.324(3), Bear Paw shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1) unless otherwise specified by rule or in this permit.
- A.10 Pursuant to ARM 17.8.324 unless otherwise specified by rule or in this permit, Bear Paw shall

not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallons capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.

- A.11 Pursuant to ARM 17.8.324 unless otherwise specified by rule or in this permit, Bear Paw shall not use any compartment of any single or multiple compartment oil-effluent water separator which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.12 Pursuant to ARM 17.8.316, Bear Paw shall use no incinerator for the burning of refuse unless such incinerator is a multiple chamber incinerator or one of other design of equal effectiveness approved by the Department prior to installation or use unless otherwise specified by rule or in this permit.
- A.13 Pursuant to ARM 17.8.316, Bear Paw shall not cause or authorize to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to 12% carbon dioxide and calculated as if no auxiliary fuel had been used unless otherwise specified by rule or in this permit.
- A.14 Pursuant to ARM 17.8.316, Bear Paw shall not cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.15 Bear Paw shall be limited to a maximum production rate of 3,102.5 MMScf at the Baker Gas Plant during any rolling 12-month period.

### **Recordkeeping**

- A.16 Bear Paw shall document, by month, the facility throughput in MMScf. By the 25th day of each month, Bear Paw shall total the amount of throughput during the previous twelve months to verify compliance with the limitation in Section III.A.15.

### **Reporting**

- A.17 On or before January 31 and July 31 of each year, Bear Paw shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by January 31 of each year, Bear Paw may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

*any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title*



*17, Chapter 8, Subchapter 12, shall state that, " based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."*

- A.18 By January 31 of each year, Bear Paw shall submit to the Department the compliance certification report required by Section V.B. The annual certification report required by Section V.B must include a statement of compliance based on the information available, which identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

*any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, " based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."*

- A.19 A Risk Management Plan developed in accordance with 40 CFR 68 shall be registered with the United States Environmental Protection Agency by June 21, 1999. Bear Paw shall submit a certification statement to the Department that states Bear Paw is in compliance with the requirements of 40 CFR 68, including registration (40 CFR 68.160) by June 21, 1999.

## B. EU01 - 448-hp Compressor Engine

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirement
B.1, B.10, B.13, B.16	Opacity	20%	Pipeline quality natural gas	Ongoing	Semi-annual
B.2, B.10, B.13, B.16	Particulate from fuel combustion	$E = 1.026 * H^{0.233}$			
B.3, B.10, B.13, B.16	Sulfur in Fuel	$\frac{50 \text{ grains}}{100 \text{ SCF}}$			
B.4, B.11, B.14, B.16	Air-to-fuel ratio (AFR) controller	Operate	Inspection, maintenance, operation	Ongoing	Semi-annual
B.5, B.11, B.14, B.16	Non-selective catalytic reduction unit				Semi-annual
B.6, B.14, B.16	Engine Speed	1000 rpm	Log	Weekly or during operational changes	Semi-annual
B.7, B.12, B.15, B.16	NO <sub>2</sub>	1.98 lb/hr	Portable analyzer	Semi-annual	Semi-annual
B.8, B.12, B.15, B.16	CO	2.96 lb/hr	Portable analyzer	Semi-annual	Semi-annual
B.9, B.10, B.13, B.16	VOC	1.00 lb/hr	Pipeline quality natural gas	Ongoing	Semi-annual

### Conditions

- B.1 Bear Paw shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- B.2 Bear Paw shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of  $E = 1.026 * H^{0.233}$  for existing fuel burning equipment, where: H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- B.3 Bear Paw shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 standard cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- B.4 The 448-hp Waukesha compressor engine shall be operated with an AFR controller (ARM 17.8.752).
- B.5 The 448-hp Waukesha compressor engine shall be operated with a NSCR unit (ARM 17.8.752).
- B.6 The 448-hp Waukesha compressor engine speed shall not exceed 1000 revolutions per minute (rpm) of continuous duty operation (ARM 17.8.752).

- B.7 NO<sub>2</sub> emissions for the 448-hp Waukesha compressor engine shall be limited to 1.98 lb/hr (ARM 17.8.752).
- B.8 CO emissions for the 448-hp Waukesha compressor engine shall be limited to 2.96 lb/hr (ARM 17.8.752).
- B.9 VOC emissions for the 448-hp Waukesha compressor engine shall be limited to 1.00 lb/hr (ARM 17.8.752).

### **Compliance Demonstration**

- B.10 Monitoring compliance with Sections III.B.1, III.B.2, III.B.3, and III.B.9 may be satisfied by burning pipeline quality natural gas in the 448-hp Waukesha compressor engine (ARM 17.8.1213).
- B.11 Monitoring compliance with conditions required by Sections III.B.4 and III.B.5 may be demonstrated by the following (ARM 17.8.1213):
  - a. Bear Paw shall operate and maintain the electronic AFR controller and NSCR unit within the parameters recommended by the equipment manufacturer; and
  - b. Bear Paw shall, at a minimum, inspect the compressor engine: the AFR controller, and the NSCR unit once every 6 months, as well as after every upset condition that could have caused damage to this control equipment. Bear Paw shall conduct any subsequent maintenance to ensure that the control equipment will continue to perform as designed.
- B.12 Semi-annually or whenever changes occur that may cause the emissions to exceed permitted levels, Bear Paw shall conduct an emissions test with a portable analyzer in order to monitor the NO<sub>x</sub> and CO emissions from the compressor engine. The portable analyzer shall be capable of achieving performance specifications equivalent to EPA traditional methods defined in 40 CFR 60, Appendix A or shall be capable of meeting the requirements of EPA Conditional Test Method 022 for the "Determination of Nitric Oxide, Nitrogen Dioxide, and NO<sub>x</sub> Emissions from Stationary Combustion Sources by Electrochemical Analyzer." Bear Paw may use another testing procedure as approved in advance by the Department. All tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). Bear Paw shall monitor compliance with the NO<sub>x</sub> and CO emission limitations in Sections III.B.7 and III.B.8, respectively, by converting the emissions test results (ppm) to a mass emissions rate (lb/hr). Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A (ARM 17.8.1213).

### **Recordkeeping**

- B.13 Bear Paw shall maintain a record verifying that only pipeline quality natural gas was used in the 448-hp Waukesha compressor engine to monitor compliance with Sections III.B.1, III.B.2, III.B.3, and III.B.9 (ARM 17.8.1212).
- B.14 Bear Paw shall maintain a weekly log on site. Each weekly log shall include results of the 6-month inspections and any operational change as well as log the NSCR unit, the AFR controller, and engine speed parameters listed below (ARM 17.8.1212):
  - a. gas production rate (MMCFD)
  - b. suction temperature
  - c. suction pressure

- d. discharge pressure
- e. engine fan horsepower
- f. setting of the NSCR unit or AFR controller
- g. changes to the settings of the NSCR unit or AFR controller
- h. maintenance performed on the NSCR unit or the AFR controller
- i. date and time of any changes or maintenance as well as logging entry
- j. operator identity

B.15 During each emissions test with the portable analyzer Bear Paw shall record, at a minimum, the following information for the engine, the compressor, and the portable analyzer (ARM 17.8.1212):

- a. facility name and location
- b. test date
- c. name, company, and signature of technician(s) performing the test
- d. emissions unit number
- e. engine model and serial number
- f. rated horsepower
- g. fuel consumption rate (metered or estimated)
- h. engine operating parameters
- i. compressor make, model and serial number
- j. suction pressure and temperature
- k. discharge pressure and temperature
- l. portable analyzer make, model and serial number
- m. calibration procedure and data
- n. test procedure and data
- o. original test strip-chart and/or original data print out
- p. EPA Test Method calculations

## Reporting

B.16 The annual compliance report required by Section V.B must contain a certification statement for the above applicable requirements. The semiannual compliance monitoring reports shall provide (ARM 17.8.1212):

- a. Verification that only pipeline quality natural gas was used in the engine;
- b. Verification that the engine is equipped with a NSCR unit and an electronic AFR controller;
- c. Verification that the log book was maintained as required by Section III.B.11 and III.B.14; and
- d. A summary of results for the emissions test data and emission calculations as required in Section III.B.12 and III.B.15.

### C. EU02 - 800-hp Compressor Engine

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirement
C.1, C.10, C.13, C.16	Opacity	20%	Pipeline quality natural gas	Ongoing	Semi-annual
C.2, C.10, C.13, C.16	Particulate from fuel combustion	$E = 1.026 * H^{-0.233}$			
C.3, C.10, C.13, C.16	Sulfur in Fuel	$\frac{50 \text{ grains}}{100 \text{ Scf}}$			
C.4, C.11, C.14, C.16	Air-to-fuel ratio (AFR) controller	Operate	Inspection, maintenance, operation	Ongoing	Semi-annual
C.5, C.11, C.14, C.16	Non-selective catalytic reduction unit				Semi-annual
C.6, C.14, C.16	Engine Speed	800 rpm	Log	Weekly or during operational changes	Semi-annual
C.7, C.12, C.15, C.16	NO <sub>2</sub>	3.53 lb/hr	Portable analyzer	Semi-annual	Semi-annual
C.8, C.12, C.15, C.16	CO	5.29 lb/hr	Portable analyzer	Semi-annual	Semi-annual
C.9, C.10, C.13, C.16	VOC	1.76 lb/hr	Pipeline quality natural gas	Ongoing	Semi-annual

#### Conditions

- C.1 Bear Paw shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- C.2 Bear Paw shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of  $E = 1.026 * H^{-0.233}$  for existing fuel burning equipment, where: H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- C.3 Bear Paw shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 standard cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- C.4 The 800-hp Waukesha compressor engine shall be operated with an AFR controller (ARM 17.8.752).
- C.5 The 800-hp Waukesha compressor engine shall be operated with a NSCR unit (ARM 17.8.752).
- C.6 The engine speed shall not exceed 800 rpm of continuous duty operation (ARM 17.8.752).
- C.7 NO<sub>2</sub> emissions for the 800-hp Waukesha compressor engine shall be limited to 3.53 lb/hr (ARM 17.8.752).
- C.8 CO emissions for the 800-hp Waukesha compressor engine shall be limited to 5.29 lb/hr (ARM

17.8.752).

- C.9 VOC emissions for the 800-hp Waukesha compressor engine shall be limited to 1.76 lb/hr (ARM 17.8.752).

### **Compliance Demonstration**

- C.10 Monitoring compliance with Sections III.C.1, III.C.2, III.C.3, and III.C.9 may be satisfied by burning pipeline quality natural gas in the 800-hp Waukesha compressor engine (ARM 17.8.1213).
- C.11 Monitoring compliance with conditions required by Sections III.C.4 and III.C.5 may be demonstrated by the following (ARM 17.8.1213):
- a. Bear Paw shall operate and maintain the electronic AFR controller and the NSCR unit within the parameters recommended by the equipment manufacturer; and
  - b. Bear Paw shall, at a minimum, inspect on the compressor engine: the AFR controller, and the NSCR unit once every 6 months, as well as after every upset condition that could have caused damage to this control equipment. Bear Paw shall conduct any subsequent maintenance to ensure that the control equipment will continue to perform as designed.
- C.12 Semi-annually or whenever changes occur that may cause the emissions to exceed permitted levels, Bear Paw shall conduct an emissions test with a portable analyzer in order to monitor the NO<sub>x</sub> and CO emissions from the compressor engine. The portable analyzer shall be capable of achieving performance specifications equivalent to EPA traditional methods defined in 40 CFR 60, Appendix A or shall be capable of meeting the requirements of EPA Conditional Test Method 022 for the "Determination of Nitric Oxide, Nitrogen Dioxide, and NO<sub>x</sub> Emissions from Stationary Combustion Sources by Electrochemical Analyzer." Bear Paw may use another testing procedure as approved in advance by the Department. All tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). Bear Paw shall monitor compliance with the NO<sub>x</sub> and CO emission limitations in Sections III.C.7 and III.C.8, respectively, by converting the emissions test results (ppm) to a mass emissions rate (lb/hr). Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A (ARM 17.8.1213).

### **Recordkeeping**

- C.13 Bear Paw shall maintain a record verifying that only pipeline quality natural gas was used in the 800-hp Waukesha compressor engine to monitor compliance with Sections III.C.1, III.C.2, III.C.3, and III.C.9 (ARM 17.8.1212).
- C.14 Bear Paw shall maintain a weekly log on site. Each weekly log shall include results of the 6-month inspections and any operational change as well as log the NSCR unit, the AFR controller, and engine speed parameters listed below (ARM 17.8.1212):
- a. gas production rate (MMCFD)
  - b. suction temperature
  - c. suction pressure
  - d. discharge pressure
  - e. engine fan horsepower
  - f. setting of the NSCR unit or AFR controller
  - g. changes to the settings of the NSCR unit or AFR controller

- h. maintenance performed on the NSCR unit or the AFR controller
  - i. date and time of any changes or maintenance as well as logging entry
  - j. operator identity
- C.15 During each emissions test with the portable analyzer Bear Paw shall record, at a minimum, the following information for the engine, the compressor, and the portable analyzer (ARM 17.8.1212):
- a. facility name and location
  - b. test date
  - c. name, company, and signature of technician(s) performing the test
  - d. emissions unit number
  - e. engine model and serial number
  - f. rated horsepower
  - g. fuel consumption rate (metered or estimated)
  - h. engine operating parameters
  - i. compressor make, model and serial number
  - j. suction pressure and temperature
  - k. discharge pressure and temperature
  - l. portable analyzer make, model and serial number
  - m. calibration procedure and data
  - n. test procedure and data
  - o. original test strip-chart and/or original data print out
  - p. EPA Test Method calculations

## **Reporting**

- C.16 The annual compliance report required by Section V.B must contain a certification statement for the above applicable requirements. The semiannual compliance monitoring reports shall provide (ARM 17.8.1212):
- a. Verification that only pipeline quality natural gas was used in the engine;
  - b. Verification the engine is equipped with a NSCR unit and an electronic AFR controller;
  - c. Verification that the log book was maintained as required by Section III.C.11 and III.C.14; and
  - d. A summary of results for the emissions test data and emission calculations required in Section III.C.12 and III.C.15.

## D. EU04 and EU09 - Challenger Flare and Guyed Utility Flare

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirement
D.1, D.5, D.9, D.12	Opacity	10%	Method 9	Every 2 years	Semi-annual
D.2, D.6, D.9, D.12	Particulate	0.10 gr/dscf corrected to 12% CO <sub>2</sub>	Method 5	As required by the Department	
D.3, D.9, D.10, D.12	Auto-igniting device and associated recorder	Install and operate	Inspection and maintenance log	Weekly or after any upset that may cause a change in the gas stream	
D.4, D.8, D.11, D.12	Ratio of natural gas to acid gas prior to flaring	20% natural gas	Measure and log the ratio of natural gas to acid gas sent to the challenger flare	Ongoing measurement and weekly log	

### Conditions

- D.1 Bear Paw shall not cause or authorize to be discharged into the atmosphere from either flare, any visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.316 and ARM 17.8.749).
- D.2 Bear Paw shall not cause or authorize to be discharged into the atmosphere from either flare, any particulate emissions in excess of 0.10 gr/dscf corrected to 12% CO<sub>2</sub> (ARM 17.8.316 and ARM 17.8.749).
- D.3 Bear Paw shall install and continuously operate a thermocouple and an associated recorder or any equivalent device to detect the presence of a flame (ARM 17.8.752).
- D.4 Bear Paw shall add natural gas to the amine regenerator acid gas stream prior to flaring the acid gas in the challenger flare. Natural gas shall be added at a ratio of 1 part natural gas for every 5 parts acid gas (20% natural gas) (ARM 17.8.752).

### Compliance Demonstration

- D.5 A Method 9 opacity test and/or other Department approved methods and procedures must be performed on the flares at the facility on an every-2-year basis, to monitor compliance with emission limitations contained in Section III.D.1 (ARM 17.8.105 and ARM 17.8.749).
- D.6 A Method 5 particulate test and/or other Department approved methods and procedures must be performed on the flares at the facility, upon request from the Department, to monitor compliance with emission limitations contained in Section III.D.2 (ARM 17.8.105 and ARM 17.8.749).
- D.7 Bear Paw shall maintain on site a log of all weekly inspections and any maintenance activities associated with either flare. Each weekly log shall contain an entry for at least the following (ARM 17.8.1213):
- date of entry
  - time of entry
  - initials of individual entering information in the log



- d. list of all equipment checked and condition
  - e. summary of maintenance performed
  - f. summary of inspection results
- D.8 Bear Paw shall measure the ratio of natural gas to acid gas that is flared by a method to be approved by the Department. Bear Paw shall maintain on site, a weekly log of the ratio of natural gas to acid gas that is flared. Each weekly log shall contain an entry with at least the following information (ARM 17.8.1213):
- a. date of entry
  - b. time of entry
  - c. initials of individual entering information in the log
  - d. amount of acid gas routed to the flare
  - e. amount of natural gas added to the acid gas stream prior to flaring
  - f. the ratio of natural gas to acid gas that was flared

### **Recordkeeping**

- D.9 Bear Paw shall maintain all test reports and submit results to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).
- D.10 Bear Paw shall maintain the inspection and maintenance log on site and submit the log to the Department upon request (ARM 17.8.1213).
- D.11 Bear Paw shall maintain the weekly gas measurement logs on site and submit the logs to the Department upon request (ARM 17.8.1213).

### **Reporting**

- D.12 The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements. Semiannual reporting shall provide (ARM 17.8.1212):
- a. Verification that Bear Paw maintained compliance with the logging requirements as required by Section III.D.7;
  - b. A summary of maintenance activities and corrective action performed during the period;
  - c. A summary of results from any Method 5 and Method 9 testing performed during the period as required in Section III.D.5 and III.D.6;
  - d. Verification that natural gas was added to the acid gas stream at a ratio of 1 part natural gas for every 5 parts acid gas (20% natural gas); and
  - e. Verification that Bear Paw maintained compliance with the logging requirements as required by Section III.D.8.

## E. EU05 - Fugitive Emissions

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirement
			Method	Frequency	
E.1, E.2, E.3, E.4	VOC service lines	Monthly inspection	Log	During inspections and repairs	Semi-annual

### Conditions

- E.1 Each calendar month, all valves, flanges, pump seals, and open-ended lines in VOC service shall be inspected for total organic liquid or vapor leaks. Detection methods incorporating sight, sound, or smell are acceptable. Bear Paw shall (ARM 17.8.752):
- Make a first attempt at repair for any leak not later than 5 calendar days after the leak is detected;
  - Repair any leak as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section III.E.1.c below; and
  - Delay of repair of equipment for which a leak has been detected will be allowed if repair is technically infeasible without a process unit shut down. Such equipment shall be repaired before the end of the first process unit shut down after detection of the leak.

### Compliance Demonstration

- E.2 A log shall be maintained on site recording each monthly leak inspection and shall be submitted to the Department upon request. Inspection records shall include, at a minimum, the following information (ARM 17.8.1213):
- date of inspection
  - findings (may indicate no leaks discovered or the location, nature, and severity of each leak)
  - leak determination method
  - corrective action (date each leak was repaired and reasons for any repair interval in excess of 15 calendar days)
  - inspector name and signature

### Recordkeeping

- E.3 Recordkeeping requirements shall be met by maintenance of the on-site monthly log (ARM 17.8.1212).

### Reporting

- E.4 The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements. Semiannual reporting shall provide (ARM 17.8.1212):
- Verification that Bear Paw maintained compliance with the logging requirements as required by Section III.E.2; and

- b. A summary of maintenance activities and corrective action performed during the period, including reasons for any repair interval in excess of 15 calendar days.

**F. EU06 - Ethylene Glycol Regenerator Vent**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirement
F.1, F.2, F.3, F.4	Off gases	Routed to Anderson Hot Oil heater, or inlet condensate knockout drum	Log	Weekly	Semi-annual

**Conditions**

- F.1 Bear Paw shall route the dehydrator regenerator off gases to the Anderson Hot Oil heater for thermal destruction at all times, except when the heater is not operating. The flash separator off gases shall be routed to the inlet condensate knockout drum (ARM 17.8.752).

**Compliance Demonstration**

- F.2 Bear Paw shall maintain on site, a log containing weekly summaries of off gas routings. Each weekly log shall contain an entry for at least the following (ARM 17.8.1213):
- date of entry
  - time of entry
  - initials of individual entering information in the log
  - summary of weekly routings of the off gases, to include where the gases were routed to and for how long

**Recordkeeping**

- F.3 Bear Paw shall maintain the log on site and submit the log to the Department upon request (ARM 17.8.1212).

**Reporting**

- F.4 The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements. Semiannual reporting shall provide (ARM 17.8.1212):
- Verification that Bear Paw maintained compliance with the logging requirements as required by Section III.F.2; and
  - A summary of why the Anderson Hot Oil heater was not operated, where the off gases were routed and for how long the off gases were routed to the alternate path.

## **G. EU07 - Product Loading**

<b>Condition(s)</b>	<b>Pollutant/ Parameter</b>	<b>Permit Limit</b>	<b>Compliance Demonstration Method Frequency</b>		<b>Reporting Requirement</b>
G.1, G.2, G.3, G.4	VOC product loading and receiving	Operation of vapor balance system	Log	During product loading and receiving	Semi-annual

### **Conditions**

- G.1 The VOC product loading and receiving at the Baker Plant shall be operated under a vapor balance system. All VOC product loading to tank trucks shall be conducted using bottom loading. Vapor flash resulting from loadout operations shall be returned to the associated storage vessel to maintain vapor balanced emissions control. Upon completion of VOC product loadout, all lines used for loading shall be purged of VOC vapors. These VOC vapors shall be routed to a flare for thermal destruction (ARM 17.8.752 and ARM 17.8.324).

### **Compliance Demonstration**

- G.2 Bear Paw shall maintain a log on site containing entries of each time product was loaded or received. The log shall contain, at a minimum (ARM 17.8.1213):
- date and time of loading and receiving
  - initials of plant personnel assisting with loading or receiving
  - truck type involved in loading or receiving
  - verification that vapor balance system was used during loading or receiving
  - verification that all lines were purged of VOC vapors upon completion of product loadout and were routed to a flare for thermal destruction

### **Recordkeeping**

- G.3 Recordkeeping requirements shall be met by maintenance of the on-site log (ARM 17.8.1212).

### **Reporting**

- G.4 The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements. Semiannual reporting shall provide (ARM 17.8.1212):
- Verification that Bear Paw maintained compliance with logging requirements as required by Section III.G.2; and
  - A summary of all loading and receiving operations that have occurred during the period.

**H. EU08 - Condensate/Natural gas storage tank, EU13 and EU14 - Y-grade horizontal storage tank, EU15 and EU16 - Propane horizontal storage tank, EU17 and EU18 - Butane horizontal storage tank, EU19 and EU20 - Natural gas storage tank, and EU23 - Methanol storage tank**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirement
H.1, H.2, H.3, H.4	Storage tanks	Fixed roof or pressurized tanks, vapor balanced, submerge filled and pressure/vacuum vent	Inspection and maintenance	Annually and as necessary	Semi-annual

**Conditions**

- H.1 Bear Paw shall use fixed roof tanks for storage of natural gasolines and pressurized tanks for storage of re-run, propane, and butane. The fixed roof tanks shall be vapor balanced, submerged filled and equipped with a pressure/vacuum vent. The pressurized tanks shall be vapor balanced, submerged filled, and equipped with a pressure/vacuum vent (ARM 17.8.752 and ARM 17.8.324).

**Compliance Demonstration**

- H.2 Bear Paw shall inspect the fixed roof and pressurized tanks, vapor balance systems, submerge fill systems and the pressure/vacuum vents annually or when problems are suspected. Maintenance shall be performed in accordance with manufacturer's instructions as necessary (ARM 17.8.1213).

**Recordkeeping**

- H.3 Bear Paw shall maintain a log on site of the annual inspections and any maintenance activities. The log shall include the date and time of the inspection, the condition of the inspected systems, and any maintenance performed (ARM 17.8.1212).

**Reporting**

- H.4 The annual compliance certification report required by Section V.B must contain a certification statement that for the above applicable requirements. The semi-annual compliance monitoring reports shall provide (ARM 17.8.1212):
- Verification that fixed roof and/or pressurized tanks are being used on all tanks
  - Verification that vapor balance systems are being used on all tanks
  - Verification that submerged fill systems are being used on all tanks
  - Verification that pressure/vacuum vents exist on all tanks
  - Verification that logging requirements were performed as required by Section III.H.3

# **I. EU11 - 1250-hp Compressor Engine(s)**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirement
I.1, I.8, I.11, I.14	Opacity	20%	Pipeline Quality natural gas	Ongoing	Semi-annual
I.2, I.8, I.11, I.14	Particulate from fuel combustion	$E=1.026 * H^{-0.233}$			
I.3, I.8, I.11, I.14	Sulfur in Fuel	<u>50 grains</u> 100 SCF			
I.4, I.9, I.12, I.14	Johnson Mathey catalytic converter	Operate	Inspection, maintenance, operation	Ongoing	Semi-annual
I.5, I.10, I.13, I.14	NO <sub>2</sub>	5.51 lb/hr	Portable analyzer	Semi-annual	Semi-annual
I.6, I.11, I.13, I.14	CO	5.51 lb/hr			Semi-annual
I.7, I.8, I.11, I.14	VOC	2.76 lb/hr	Pipeline quality natural gas	Ongoing	Semi-annual

## **Conditions**

- I.1 Bear Paw shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- I.2 Bear Paw shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of  $E = 1.026 * H^{-0.233}$  for existing fuel burning equipment, where: H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- I.3 Bear Paw shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 standard cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- I.4 The 1250-hp compressor engine(s) shall be controlled by a catalytic converter(s) (ARM 17.8.749 and ARM 17.8.752).
- I.5 NO<sub>x</sub> emissions for the 1250-hp compressor engine(s) shall be limited to 5.51 lb/hr (ARM 17.8.752).
- I.6 CO emissions for the 1250-hp compressor engine(s) shall be limited to 5.51 lb/hr (ARM 17.8.752).
- I.7 VOC emissions for the 1250-hp compressor engine(s) shall be limited to 2.76 lb/hr (ARM 17.8.752).

## Compliance Demonstration

- I.8 Monitoring compliance with Sections III.I.1, III.I.2, III.I.3, and III.I.7 may be satisfied by burning pipeline quality natural gas in the 1250-hp compressor engine(s) (ARM 17.8.1213).
- I.9 Monitoring compliance with conditions required by Sections III.I.4 may be demonstrated by the following (ARM 17.8.1213):
- a. Bear Paw shall operate and maintain the catalytic converter within the parameters recommended by the equipment manufacturer; and
  - b. Bear Paw shall, at a minimum, inspect the catalytic converter on the compressor engine once every 6 months, as well as after every upset condition, which could have caused damage to this control equipment. Bear Paw shall conduct any subsequent maintenance to ensure that the control equipment will continue to perform as designed.
- I.10 Semi-annually or whenever changes occur that may cause the emissions to exceed permitted levels, Bear Paw shall conduct an emissions test with a portable analyzer in order to monitor the NO<sub>x</sub> and CO emissions from the compressor engine(s). The portable analyzer shall be capable of achieving performance specifications equivalent to EPA traditional methods defined in 40 CFR 60, Appendix A or shall be capable of meeting the requirements of EPA Conditional Test Method 022 for the "Determination of Nitric Oxide, Nitrogen Dioxide, and NO<sub>x</sub> Emissions from Stationary Combustion Sources by Electrochemical Analyzer." Bear Paw may use another testing procedure as approved in advance by the Department. All tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). Bear Paw shall monitor compliance with the NO<sub>x</sub> and CO emission limitations in Sections III.I.5 and III.I.6, respectively, by converting the emissions test results (ppm) to a mass emissions rate (lb/hr). Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A (ARM 17.8.1213).

## Recordkeeping

- I.11 Bear Paw shall maintain a record verifying that only pipeline quality natural gas was used in the 1250-hp compressor engine(s) to monitor compliance with Section III.I.1, III.I.2, III.I.3, and III.I.7 (ARM 17.8.1212).
- I.12 Bear Paw shall maintain a weekly log on site. Each weekly log shall include results of the 6-month inspections and any operational change as well as log the catalytic converter and engine speed parameters listed below (ARM 17.8.1212):
- a. gas production rate (MMcfd)
  - b. suction temperature
  - c. suction pressure
  - d. discharge pressure;
  - e. engine fan horsepower
  - f. setting of the catalytic converter
  - g. changes to the settings of the catalytic converter
  - h. maintenance performed on the catalytic converter
  - i. date and time of any changes or maintenance as well as logging entry
  - j. operator identity
- I.13 During each emissions test with the portable analyzer Bear Paw shall record, at a minimum, the following information for the engine, the compressor, and the portable analyzer (ARM 17.8.1212):

- a. facility name and location
- b. test date
- c. name, company, and signature of technician(s) performing the test
- d. emissions unit number
- e. engine model and serial number
- f. rated horsepower
- g. fuel consumption rate (metered or estimated)
- h. engine operating parameters
- i. compressor make, model and serial number
- j. suction pressure and temperature
- k. discharge pressure and temperature
- l. portable analyzer make, model and serial number
- m. calibration procedure and data
- n. test procedure and data
- o. original test strip-chart and/or original data print out
- p. EPA Test Method calculations

### **Reporting**

- I.14 The annual compliance report required by Section V.B must contain a certification statement for the above applicable requirements. The semiannual compliance monitoring reports shall provide (ARM 17.8.1212):
  - a. Verification that only pipeline quality natural gas was used in the engine(s);
  - b. Verification that the engine(s) are equipped with a catalytic converter;
  - c. Verification that the log book was maintained as required by Sections III.I.9 and III.I.12; and
  - d. A summary of results for the emissions test data and emission calculations as required in Sections III.I.10 and III.I.13.



## J. EU12 - Amine Regenerator

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirement
J.1, J.3, J.4	Off gases (Acid Gas)	Routed to the challenger flare	Log	Weekly	Semi-annual
J.2, J.5	Natural Gas Processing: SO <sub>2</sub> Emissions	Subpart LLL - exempt (< 2 Long Tons/day)	Subpart LLL - exempt (< 2 Long Tons/day)	Subpart LLL - exempt (< 2 Long Tons/day)	

### Conditions

- J.1 Bear Paw shall route the Amine Regenerator off gases (Acid Gas) to the challenger flare for thermal destruction at all times (ARM 17.8.752).
- J.2 Bear Paw shall comply with all applicable standards, limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 60, Subpart LLL included in Appendix F, as it applies to the amine unit. Because Bear Paw demonstrated having a design capacity less than 2 long tons per day of hydrogen sulfide in the acid gas (expressed as sulfur), Bear Paw is only required to comply with 40 CFR Part 60.647(c) (ARM 17.8.340 and 40 CFR Part 60).

### Compliance Demonstration

- J.3 Bear Paw shall maintain on site, a weekly log verifying that all off gases from the Amine regenerator were routed to the challenger flare. Each weekly log shall contain an entry for at least the following information (ARM 17.8.1213):
- date of entry
  - time of entry
  - initials of individual entering information in the log
  - verification that the flare was continuously operated

### Recordkeeping

- J.4 Bear Paw shall maintain the weekly log on site and submit the log to the Department upon request (ARM 17.8.1212).
- J.5 Bear Paw shall maintain all recordkeeping requirements as required by 40 CFR 60.647(c), Subpart LLL (ARM 17.8.340 and 40 CFR Part 60).

### Reporting

- J.6 The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements. Semiannual reporting shall provide (ARM 17.8.1212):
- Verification that the log book was maintained as required by Section III.J.3; and
  - Verification that Bear Paw complied with 40 CFR 60, Subpart LLL.

## SECTION IV - NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana (ARM) and Federal Regulations identified as not applicable to the facility at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirement that may become applicable during the permit term.

### A. Facility-Wide

Rule Citation	Reason
40 CFR 72 40 CFR 73 40 CFR 75 40 CFR 76 40 CFR 77 40 CFR 78	These requirements are not applicable because the facility is not an affected source as defined by the acid rain regulations.
40 CFR 63 40 CFR 79 40 CFR 80 40 CFR 82	These requirements are not applicable because the facility is not an affected source as defined in these regulations.
40 CFR 87	This rule refers to a process, equipment or activity not used at this facility.
ARM 17.8.310 ARM 17.8.320	This facility does not have the emitting unit(s) or pollutant referred to in these rules.
ARM 17.8.321 ARM 17.8.323 ARM 17.8.331 ARM 17.8.332 ARM 17.8.333 ARM 17.8.334	This facility is not in this source category.

### B. Emission Units

Air Quality Administrative Rules of Montana and Federal Regulations identified as not applicable to a specific emissions unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirement that may become applicable during the permit term.

UNIT	RULE	REASON
EU03	40 CFR 60, Subparts D, Da, Db, and Dc	These units do not meet the definition of applicability for the listed rule.
EU05	40 CFR 60, Subpart KKK	
EU06	40 CFR 63, Subparts HH, HHH	
EU07	40 CFR 60, Subpart XX	
EU08, EU13 through EU25	40 CFR 60, Subparts K and Ka	

## SECTION V – GENERAL PERMIT CONDITIONS

### A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
4. The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

### B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

2. Compliance certifications shall be submitted by January 31 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).
3. Compliance certifications shall include the following:
  - a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term or condition during the certification period, and whether such methods or other means provide continuous or intermittent data, as well as the additional information required by ARM 17.8.1213(7)(c)(ii);
  - c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in ARM 17.8.1213(7)(c)(ii), as well as the additional information required by ARM 17.8.1213(7)(c)(iii); and
  - d. Such other facts as the Department may require to determine the compliance status of the source.
4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

**C. Permit Shield**

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
3. Nothing in this permit alters or affects the following:
  - a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section.
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
  - c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA.

- d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA.
  - e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA.
  - f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA.
  - g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
- 4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
  - 5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
  - 6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
  - 7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & N).

**D. Monitoring, Recordkeeping, and Reporting Requirements**

ARM 17.8, Subchapter 12, operating Permit Program §1212(2)&(3)

- 1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information.
  - a. The date, place as defined in the permit, and time of sampling or measurement
  - b. The date(s) analyses were performed
  - c. The company or entity that performed the analyses
  - d. The analytical techniques or methods used
  - e. The results of such analyses
  - f. The operating conditions at the time of sampling or measurement
- 2. The permittee shall retain records of all required monitoring data and support information

for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by January 31 and July 31 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on January 31 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on July 31 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

**E. Prompt Deviation Reporting**

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported as part of the routine reporting requirements under ARM 17.8.1212(3)(b) and, if applicable, in accordance with the malfunction reporting requirements under ARM 17.8.110, unless otherwise specified in an applicable requirement.

**F. Emergency Provisions**

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
  - a. An emergency occurred and the permittee can identify the cause(s) of the emergency.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other

requirements in the permit.

- d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

#### **G. Inspection and Entry**

##### **ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)**

1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
  - a. Enter the premises where a source required to obtain a permit is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
  - c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
  - d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.
2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

#### **H. Fee Payment**

##### **ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)**

1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.
2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional

assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

**I. Minor Permit Modifications**

**ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)**

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.
2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

**J. Changes Not Requiring Permit Revision**

**ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)**

1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met.
  - a. The proposed changes do not require the permittee to obtain an air quality preconstruction permit under ARM Title 17, Chapter 8, Subchapter 7.
  - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10.
  - c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions.
  - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit.
  - e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes.
2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
3. Pursuant to the conditions above, the permittee is authorized to make Section 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met.
  - a. Each proposed change does not weaken the enforceability of any existing permit conditions.
  - b. The Department has not objected to such change.



- c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition.
  - d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

**K. Significant Permit Modifications**

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

- 1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
  - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;
  - b. Every significant change in existing permit monitoring terms or conditions;
  - c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or
  - d. Any other change determined by the Department to be significant.
- 2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
- 3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

**L. Reopening for Cause**

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances.

- 1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2).

2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit.
3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

**M. Permit Expiration and Renewal**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of 5 years.
2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

**N. Severability Clause**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

**O. Transfer or Assignment of Ownership**

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

**P. Emissions Trading, Marketable Permits, Economic Incentives**

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

**Q. No Property Rights Conveyed**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

**R. Testing Requirements**

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

**S. Source Testing Protocol**

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

**T. Malfunctions**

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

**U. Circumvention**

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

**V. Motor Vehicles**

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

**W. Annual Emissions Inventory**

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

**X. Open Burning**

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

**Y. Preconstruction Permits**

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §705, 708 and 733 (ARM 17.8.705(1)(r), 708 and 733(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

1. Except as specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.705(1)(a)-(q).
2. The permittee shall comply with ARM 17.8.705, 706 and 733.
3. ARM 17.8.705(1)(r)(i) specifies de minimis changes as construction or changed conditions of operation at a facility holding an air quality preconstruction permit issued under Chapter 8 that does not increase the facility's potential to emit by more than 15 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):
  - a. Any construction or changed condition that would violate any condition in the facility's existing air quality preconstruction permit or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.705(2).
  - b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8.
  - c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804.
  - d. Any construction or improvement project with a potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality preconstruction permitting.
  - e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.

4. Any facility making a de minimis change pursuant to ARM 17.8.705(1)(r) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.705(1)(r)(iv). (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP).

**Z. National Emission Standard for Asbestos**  
40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

**AA. Asbestos**  
ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, *et seq.*, and ARM 17.74.401, *et seq.* (State only)

**BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners**  
40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

**CC. Stratospheric Ozone Protection – Recycling and Emission Reductions**  
40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B.

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161.
4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166.
5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

**DD. Emergency Episode Plan**

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

**EE. Definitions**

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

# APPENDICES

## Appendix A

### INSIGNIFICANT EMISSION UNITS

**Disclaimer:** The information in this appendix is not State or Federally enforceable but is presented to assist Bear Paw, permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), An insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than 5 tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to section 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

#### List of Insignificant Activities:

The following table of insignificant sources and/or activities were provided by Bear Paw to assist in understanding the facility's layout. Because there are no requirements to update such a list, the emissions units and/or activities may change from those specified in the table.

Emissions Unit ID	Description
IEU1	Anderson-Baird Hot Oil Heater, 6.5 MMBtu/hr
IEU2	Amine Regenerator Heater, 2.3 MMBtu/hr
IEU3	Methyl Mercapatan Storage Tank, 67 gal



## Appendix B

### DEFINITIONS and ABBREVIATIONS

"**Act**" means the Clean Air Act, as amended, 42 U.S. 7401, *et seq.*

"**Administrative permit amendment**" means an air quality operating permit revision that:

- (a) Corrects typographical errors
- (b) Identifies a change in the name, address, or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source
- (c) Requires more frequent monitoring or reporting by Bear Paw
- (d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements
- (e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225
- (f) Incorporates any other type of change which the Department has determined to be similar to those revisions set forth in (a)-(e), above.

"**Applicable requirement**" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA
- (b) Any federally enforceable term, condition or other requirement of any air quality preconstruction permit issued by the Department under subchapters 7, 8, 9, and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D
- (c) Any standard or other requirement under sec. 7411 of the FCAA, including sec. 7411(d)
- (d) Any standard or other requirement under sec. 7412 of the FCAA, including any requirement concerning accident prevention under sec. 7412(r)(7), but excluding the contents of any risk management plan required under sec. 7412(r)
- (e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder
- (f) Any requirements established pursuant to sec. 7661c(b) or sec. 7414(a)(3) of the FCAA

- (g) Any standard or other requirement governing solid waste incineration, under sec. 7429 of the FCAA
- (h) Any standard or other requirement for consumer and commercial products, under sec. 7511b(e) of the FCAA
- (i) Any standard or other requirement for tank vessels, under sec. 7511b(f) of the FCAA
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to sec. 7661c(e) of the FCAA
- (l) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under subchapter 6.

**"Department"** means the Montana Department of Environmental Quality.

**"Emission units"** means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under sec. 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

**"FCAA"** means the Federal Clean Air Act, as amended.

**"Federally enforceable"** means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana state implementation plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana state implementation plan and expressly requires adherence to any permit issued under such program.

**"Fugitive emissions"** means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

**"General air quality operating permit" or "general permit"** means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

**"Hazardous air pollutant"** means any air pollutant listed as a hazardous air pollutant pursuant to section 112(b) of the FCAA.

**"Non-federally enforceable requirement"** means the following as they apply to emission units in a source requiring an air quality operating permit:

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA

- (b) Any term, condition or other requirement contained in any air quality preconstruction permit issued by the Department under subchapters 7, 8, 9, and 10 of this chapter that is not federally enforceable
- (c) Does not include any Montana ambient air quality standard contained in subchapter 2 of this chapter.

**"Permittee"** means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

**"Regulated air pollutant"** means the following:

- (a) Nitrogen oxides or any volatile organic compounds
- (b) Any pollutant for which a national ambient air quality standard has been promulgated
- (c) Any pollutant that is subject to any standard promulgated under sec. 7411 of the FCAA
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA
- (e) Any pollutant subject to a standard or other requirement established or promulgated under sec. 7412 of the FCAA, including but not limited to the following:
  - (i) Any pollutant subject to requirements under sec. 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in section 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in section 7412(e) of the FCAA
  - (ii) Any pollutant for which the requirements of sec. 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to sec. 7412(g)(2)

**"Responsible official"** means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars)
  - (ii) The delegation of authority to such representative is approved in advance by the Department.
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency)
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

#### Abbreviations:

ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
BDT	bone dry tons
Btu	British Thermal Unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Montana Department of Environmental Quality
dscf	dry standard cubic foot
dscfm	dry standard cubic foot per minute
EPA	U.S. Environmental Protection Agency
EPA Method	Test methods contained in 40 CFR 60, Appendix A
EU	emission units
FCAA	Federal Clean Air Act
gr	grains
HAP	hazardous air pollutant
H <sub>2</sub> S	hydrogen sulfide
IEU	insignificant emissions unit
Mbdft	thousand Board feet
Method 5	40 CFR 60, Appendix A, Method 5
Method 9	40 CFR 60, Appendix A, Method 9
MMbdft	million Board feet
MMBtu	million British thermal units
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	oxides of nitrogen
O <sub>2</sub>	oxygen
Pb	lead
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns in size
psi	pounds per square inch
Scf	standard cubic feet
SIC	Source Industrial Classification
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	oxides of sulfur
tpy	tons per year
U.S.C.	United States Code
VE	visible emissions
VOC	volatile organic compound

**Appendix C**  
**NOTIFICATION ADDRESSES**

Compliance Notifications:

Montana Department of Environmental Quality  
Permitting and Compliance Division  
Air & Waste Management Bureau  
P.O. Box 200901  
Helena, MT 59620-0901

United States EPA  
Air Program Coordinator  
Region VIII, Montana Office  
10 West 15<sup>th</sup> Street, Suite 3200  
Helena, MT 59626

Permit Modifications:

Montana Department of Environmental Quality  
Permitting and Compliance Division  
Air & Waste Management Bureau  
P.O. Box 200901  
Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance  
Air and Radiation Program  
US EPA Region VIII 8P-AR  
999 18th Street, Suite 500  
Denver, CO 80202-2466

## Appendix D

### AIR QUALITY INSPECTOR INFORMATION

**Disclaimer:** The information in this appendix is not State or Federally enforceable but is presented to assist Bear Paw, permitting authority, inspectors, and the public.

1. **Directions to Plant:** The Baker Gas Plant is located approximately one mile northeast of Baker, Montana in Fallon County. Traveling North out of Baker on Highway 7, turn east on county road 81 #603. The facility is located on the lefthand side of the road approximately 1/4 of a mile down county road 81.
2. **Safety Equipment Required:** Visitors are expected to have hardhats, eye protection and steel toed boots. Bear Paw will provide ear protection. A safety briefing is required before entering the plant area.
3. **Facility Plot Plan:** A facility plot plan was submitted on December 15, 1999 along with the Title V Operating Permit Application.